AMENDMENTS TO THE CLAIMS

The following claim listing replaces all prior listings of the claims submitted in the application:

1. (Original) An electrophoresis device for focusing a charged analyte comprising: a separation chamber having an inlet port and an outlet port defining between them a fluid flow path through the separation chamber for sample fluid comprising an analyte; electrodes separated from the separation chamber by a membrane and operative when energized to generate an electric field gradient in the separation chamber; and molecular sieve in the separation chamber operative to shift the location at which a stationary focused band of analyte forms under a given set of focusing process parameters including, at least the electric field gradient, and hydrodynamic force of sample fluid flow along the flow path through the separation chamber.

2. (Original) The electrophoresis device of claim 1 wherein there is a gradient in the electric field.

3. (Original) The electrophoresis device of claim 1 further comprising an electrode chamber with the electrodes positioned in the electrode chamber, wherein the electrode chamber is separated from the separation chamber by the membrane, and wherein the membrane is a permeable material.

4. (Original) The electrophoresis device of claim 3, wherein the electrode chamber is non-uniform and the separation chamber is encircled longitudinally by the electrode chamber.

5. (Original) The electrophoretic device of claim 1, wherein the electrodes comprise an electrode array.

6. (Original) The electrophoresis device of claim 5, wherein each electrode of the electrode array is capable of being individually controlled.

7. (Original) The electrophoresis device of claim 5, wherein the electrode array is operative to generate an electric field gradient which can be dynamically controlled.

8. (Currently Amended) The electrophoresis device of claim 1, wherein the analyte is a charged analyte and the degree to which the stationary focused band of charged analyte is shifted for a given set of focusing conditions varies with the molecular weight of the charged analyte.

9. (Currently Amended) The electrophoresis device of claim 1, wherein the analyte is a charged analyte and the degree to which the stationary focused band of charged analyte is shifted for a given set of focusing conditions varies with the molecular size of the charged analyte.

10. (Currently Amended) The electrophoresis device of claim 1, wherein the analyte is a charged analyte and the degree to which the stationary focused band of charged analyte is shifted for a given set of focusing conditions is proportional to the molecular weight of the charged analyte.

11. (Original) The electrophoresis device of claim 1, wherein the sieve comprises a gel.

12. (Original) The electrophoresis device of claim 11, wherein the gel is an organic gel.

13. (Original) The electrophoresis device of claim 11, wherein the gel is an inorganic gel.

14. (Original) The electrophoresis device of claim 11, wherein the gel is a fixed gel.

15. (Original) The electrophoresis device of claim 11, wherein the gel is a soluble gel.

16. (Original) The electrophoresis device of claim 11, wherein the gel comprises molecules having a molecular weight of between about 2000 and about 100,000.

17. (Original) The electrophoresis device of claim 1, wherein the sieve comprises zeolite.

18 – 23. (Cancelled)

24. (Original) A method for focusing a charged analyte comprising: providing an electrophoresis device for focusing the analyte, comprising: a separation chamber having an inlet port and an outlet port defining between them a fluid flow path through the separation chamber for sample fluid comprising the analyte; electrodes separated from the separation chamber by a membrane and operative when energized to generate an electric field gradient in the separation chamber; and molecular sieve in the separation chamber operative to shift the location at which a stationary focused band of the analyte forms under a given set of focusing process parameters including, at least the electric field gradient, and hydrodynamic force of sample fluid flow along the flow path through the separation chamber; and introducing a flow of sample fluid into the separation chamber, the sample fluid comprising the analyte; energizing at least a subset of the electrodes to establish an electric field gradient in the separation chamber effective to focus the analyte in the separation chamber.

24'. (Cancelled)

24''. (Cancelled)

25 – 54. (Cancelled)